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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,010

06/28/2005

Gunter Saliger

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EXAMINER

SINGH, SUNIL K

ART UNIT

PAPER NUMBER

3732

MAIL DATE

DELIVERY MODE

10/23/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/541,010	Applicant(s) SALIGER ET AL.	
	Examiner Sunil K. Singh	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 18-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/14/2009 has been entered.

Election/Restrictions

2. Newly submitted claims 18-20 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: The newly submitted claims now call for an apparatus for using the method. The apparatus can be used for a materially different process such as creating a superstructure of a coping rather than an abutment or crown.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claim 18-20 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1- 9 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Willoughby (US 6,126,445) in view of Perot et al. (US 6,398,554).

Willoughby discloses a method that includes: recording a real clinical situation or a shaped clinical situation of the implant as a digital data (column 50, lines 35-45); analyzing the recorded situation and determining an implant axis (column 50, lines 45-53); computing an optimum shape of the dental superstructure based at least in part on the determined implant axis (column 50, lines 58-65); fabricating the first and second elements from one or more blanks (66) on the basis of digital data with aid of equipment matching (column 50, line 58-column 51, line 45); transmitting the digital data to machining equipment for fabrication of the elements (column 50, line 58-column 51, line 45); determining a mating surface between the first digital data and the second digital data; wherein the shape of the element is described by at least two parameters: tilt angle and the angle of rotation (column 50, lines 52-53); wherein the shape of the dental superstructure are described in the coordinate system of the geometry; wherein the method includes interactively determining the axis of the implant by a user (column 50, lines 60-65); wherein the first element of is an abutment (22) and the second element is a crown (26) (column 52, lines 1-10); wherein the superstructure comprises a number of abutments which are interconnected by a common frame construction (i.e. bridge) (column 52, line 2)(also see figures 34-39a); wherein the distribution rules can be varied by a user; and wherein the element can be a cap (column 55, lines 54-56).

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However, Willoughby fails to teach automatically separating the superstructure into a first element and a second element.

Perot teaches a method that includes recording a separate 1st element (R1) and a 2nd element (R2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Willoughby to separate the superstructure into a first element (crown) and a second element (abutment) in order to modify each element resulting in a more precise fit between the two elements and between the elements and the patient's oral cavity. Furthermore, it would have been obvious to modify this method to make it done automatically, since it has been held that broadly providing a mechanical or automatic means to replace manual activity which has accomplished the same result involves only routine skill in the art. See *In re Venner*, 120 USPQ 192.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Willoughby in view of Perot et al. and further in view of Rathke (USPN 6,968,247).

Willoughby/Perot teaches a method as above, but fails to adequately disclose a third element, being a veneer, to be fabricated by said method.

Rathke teaches a veneer to be fabricated by a digitized method as above. It would have been obvious to one of ordinary skill in the art to modify Willoughby/Perot's method in view of Rathke's in order to make a more aesthetically pleasing abutment system.

Response to Arguments

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 Form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sunil K. Singh whose telephone number is (571) 272-3460. The examiner can normally be reached on Monday-Friday (Increased Flex Schedule).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris L. Rodriguez can be reached on (571) 272-4964. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

10/21/2009

/Sunil K Singh/
Examiner, Art Unit 3732

/Cris L. Rodriguez/
Supervisory Patent Examiner, Art Unit 3732